

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A composition, comprising:

a particle chain having at least two connected particles and a link that connects the at least two connected particles, wherein:

the at least two connected particles and the link are integrally formed of PVA;

the at least two connected particles include a first particle comprising a first polymer and a second particle comprising a second polymer;

at least one of the at least two connected particles has an interior region with pores having a first mean size, ~~and~~ a surface region with pores having a second mean size, and a body region between the interior region and the surface region, the body region with pores having a third mean size, the third mean size being greater than the second mean size,

the first mean size is about 20 microns or more of the pores of the interior region of the at least one of the at least two connected particles is greater than the mean size of the pores of the surface region of the at least one of the at least two connected particles;

the second mean size is about one micron or less;

the third mean size is about 18 microns or less; and

the particle chain includes at least one of the following:

(a) —the link having has an aspect ratio of at most about 1,000 and the link having has an aspect ratio of at least about 0.001; ~~and~~

(b) —a ratio of the diameter of one of the at least two particles to a width of the link is at least about 0.5 and the ratio of the diameter of one of the at least two particles to a width of the link is at most about 100;

the link has a length of at least about one micron and wherein the link has a length of at most about 50,000 microns; and
the link has a width of at most about 0.01 inch and the link has a width of at least 0.001 inch.

2. (Original) The composition of claim 1, wherein each of the at least two connected particles has a diameter of from about ten microns to about 3,000 microns.

3. (Original) The composition of claim 1, wherein the particle chain has a restrained length of at most about 50 centimeters.

4. (Original) The composition of claim 1, wherein the particle chain has a restrained length of at least about one centimeter.

5-10. (Cancelled)

11. (Previously Presented) The composition of claim 1, wherein the link has an aspect ratio of at most 25.

12-22. (Cancelled).

23. (Original) The composition of claim 1, wherein the at least two connected particles comprise first and second particles, and a diameter of the first particle is the same as a diameter of the second particle.

24. (Original) The composition of claim 1, wherein the at least two connected particles comprise first and second particles, and a diameter of the first particle is different from a diameter of the second particle.

25. (Previously Presented) The composition of claim 1, wherein the composition further comprises a carrier fluid, and the particle chain is in the carrier fluid.

26. (Original) The composition of claim 25, wherein the carrier fluid comprises a saline solution.

27. (Original) The composition of claim 25, wherein the carrier fluid comprises a contrast agent.

28. (Original) The composition of claim 25, wherein the at least two connected particles have an arithmetic mean diameter of about 3,000 microns or less.

29. (Original) The composition of claim 25, wherein the at least two connected particles have an arithmetic mean diameter of about ten microns or more.

30. (Original) The composition of claim 1, wherein the particle chain has a two-dimensional structure.

31. (Original) The composition of claim 1, wherein the particle chain has a three-dimensional structure.

32-48. (Cancelled).

49. (Previously Presented) The composition of claim 1, wherein the link has a length of at least about 500 microns.

50. (Previously Presented) The composition of claim 1, wherein the link has a length of at least about 1,000 microns.

51. (Previously Presented) The composition of claim 1, wherein the link has a length of at least about 5,000 microns.

52. (Previously Presented) The composition of claim 1, wherein the link has a length of at least about 10,000 microns.

53. (Previously Presented) The composition of claim 1, wherein the link has a length of at least about 30,000 microns.

54-59. (Cancelled).

60. (Previously Presented) The composition of claim 1, further comprising a particle chain complex comprising the first particle attached to two or more particle chains.

61. (Cancelled).

62. (Currently Amended) The composition of claim 61, wherein ~~the first polymer~~ comprises PVA comprises cross-linked PVA.

63. (Previously Presented) The composition of claim 62, wherein the first particle has a sphericity of about 0.9 or more.